

Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending December 13, 2014

Prepared by the Office of Infectious Disease Epidemiology and Outbreak Response Infectious Disease Bureau – Prevention and Health Promotion Administration Maryland Department of Health and Mental Hygiene

The data presented in this document are provisional and subject to change as additional reports come in.

SUMMARY

During the week ending December 13, 2014, influenza-like illness (ILI) intensity in Maryland was **MODERATE** and there was **WIDESPREAD** geographic activity. The proportion of outpatient visits for ILI reported by Sentinel Providers and Maryland Emergency Departments increased. The proportion of MRITS respondents experiencing ILI decreased. The proportion of specimens testing positive for influenza at the reporting Clinical Laboratories rose for the seventh straight week. The DHMH lab saw a further rise in the number of specimens testing positive for influenza – almost all were Type A (H3N2). A total of 101 influenza-associated hospitalizations were reported. There were 9 outbreaks of respiratory disease. Nationally, influenza activity continues to climb.

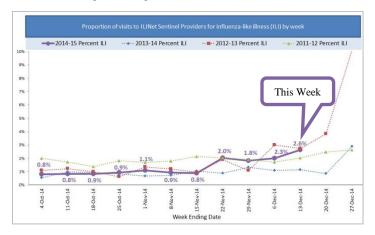
Click here to visit our influenza surveillance web page



| Influenza Geographic Spread |
|--------------------------------|
| No Activity |
| Sporadic |
| Local |
| Regional |
| ✓ Widespread |

ILINet Sentinel Providers

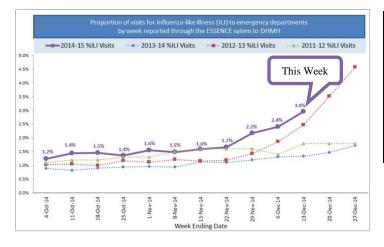
Seventeen sentinel providers reported a total of 9,659 visits this week. Of those, 254 (2.6%) were visits for ILI. This is above the Maryland baseline of 2.0%.



| ILI Visits To Sentinel Providers By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | 51 (20%) | 49 (22%) | 442 (29%) |
| Age 5-24 | 117(46%) | 102 (47%) | 677 (45%) |
| Age 25-49 | 60 (24%) | 49 (22%) | 262 (17%) |
| Age 50-64 | 21 (8%) | 17 (8%) | 87 (6%) |
| Age ≥ 65 | 5 (2%) | 2 (1%) | 32 (2%) |
| Total ILI Visits | 254 (100%) | 219 (100%) | 1500 (100%) |

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 45,913 visits this week through the ESSENCE surveillance system. Of those, 1,357 (3.0%) were visits for ILI.



| ILI Visits To Emergency Departments By Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|---|-------------------------|-------------------------|----------------------|
| Age 0-4 | 353 (26%) | 345 (31%) | 2580 (30%) |
| Age 5-24 | 549 (40%) | 373 (33%) | 3124 (36%) |
| Age 25-49 | 284 (21%) | 246 (22%) | 1936 (22%) |
| Age 50-64 | 101 (7%) | 100 (9%) | 705 (8%) |
| Age ≥ 65 | 70 (5%) | 50 (4%) | 365 (4%) |
| Unknown | 0 (0%) | 0 (0%) | 3 (<1%) |
| Total ILI Visits | 1357 (100%) | 1114 (100%) | 8713 (100%) |

Other states' influenza information:

Delaware http://dhss.delaware.gov/dph/epi/influenzahome.html

District of Columbia http://doh.dc.gov/service/influenza

Pennsylvania http://www.portal.state.pa.us/portal/server.pt/community/influenza (flu)/14161

Virginia http://www.vdh.state.va.us/Epidemiology/flu/

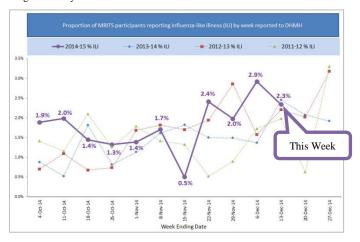
West Virginia http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx

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Community-based Influenza Surveillance (MRITS and Google Flu Trends)

MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 642 residents responded to the MRITS survey this week. Of those, 15 (2.3%) reported having ILI and missing a cumulative 34 days of regular daily activities. According to Google Flu Trends, influenza activity is "High" in Maryland.



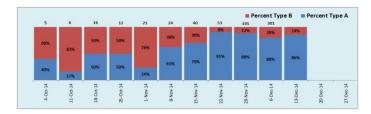


Clinical Laboratory Influenza Testing

Thirty-six clinical laboratories reported performing 2,688 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 652 (24.3%) were positive for influenza. Of those testing positive, 563 (86.3%) were influenza Type A and 89 (13.7%) were influenza Type B. The reliability of RIDTs depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

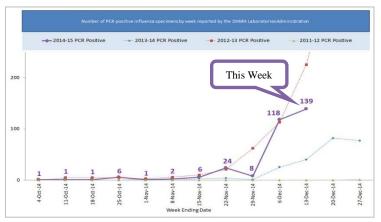


| Positive Rapid Flu Tests by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Type A | 563 (86%) | 240 (80%) | 1084 (82%) |
| Туре В | 89 (14%) | 61 (20%) | 237 (18%) |
| Total | 652 (100%) | 301 (100%) | 1321 (100%) |



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 306 PCR tests for influenza. Of those, 139 (45.4%) specimens tested positive. Of those, 138 (99.3%) were Type A (H3N2) and 1 (0.7%) was Type B. PCR testing is more reliable than RIDT. The DHMH testing identifies subtypes of influenza A, information that is not available from the RIDT results. The table below summarizes results by type and subtype.



| Positive PCR Tests by Type (Subtype) | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Type A (H1) | | | |
| Type A (H3) | 138 (99%) | 117 (99%) | 300 (98%) |
| Type A (H3N2v) | | | |
| Туре В | 1 (1%) | 1 (1%) | 7 (2%) |
| Total | 139 (100%) | 118 (100%) | 307 (100%) |

Where to get an influenza vaccination

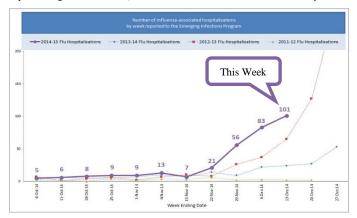
Interested in getting a flu vaccine for the 2014-15 influenza season? Go to http://dhmh.maryland.gov/flumd/SitePages/getvaccinated.aspx and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

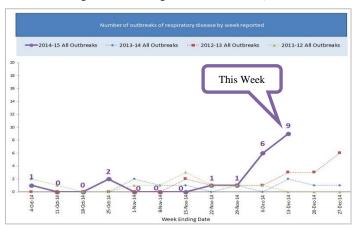
This week, hospitals in Maryland reported 101 influenza-associated hospitalizations. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g. RIDT or PCR, is considered an "influenza-associated hospitalization" for purposes of influenza surveillance.)



| Influenza- Associated Hospitalizations by Age Group | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|--|-------------------------|-------------------------|----------------------|
| Age 0-4 | 13 (13%) | 8 (10%) | 37 (12%) |
| Age 5-17 | 7 (7%) | 3 (4%) | 15 (5%) |
| Age 18-24 | 4 (4%) | 6 (7%) | 14 (4%) |
| Age 25-49 | 12 (12%) | 14 (17%) | 43 (14%) |
| Age 50-64 | 14 (14%) | 6 (7%) | 46 (14%) |
| Age ≥ 65 | 51 (50%) | 46 (55%) | 163 (51%) |
| Total | 101 (100%) | 83 (100%) | 318 (100%) |

Outbreaks of Respiratory Disease

There were 9 respiratory outbreaks reported to DHMH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g. from ILI to influenza.)



| Respiratory Outbreaks by Type | This Week Number (%) | Last Week Number (%) | Season Number (%) |
|-------------------------------------|-------------------------|-------------------------|----------------------|
| Influenza | 6 (67%) | 1 (17%) | 7 (35%) |
| Influenza-like Illness | 3 (33%) | 4 (67%) | 7 (35%) |
| Pneumonia | | 1 (17%) | 6 (30%) |
| Other Respiratory | | | |
| Total | 9 (100%) | 6 (100%) | 20 (100%) |

National Influenza Surveillance (CDC)

During week 50 (December 7-13, 2014), influenza activity continued to increase in the United States.

- Viral Surveillance: Of 20,064 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 50, 5,200 (25.9%) were positive for influenza.
- O Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- $\verb|O Influenza-associated Pediatric Deaths:| Four influenza-associated pediatric deaths were reported. \\$
- Influenza-associated Hospitalizations: A cumulative rate for the season of 6.2 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 3.7%, above the national baseline of 2.0%. Nine of 10 regions reported ILI at or above region-specific baseline levels. Puerto Rico and 13 states experienced high ILI activity; six states experienced moderate ILI activity; New York City and five states experienced low ILI activity; 26 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- Geographic Spread of Influenza: The geographic spread of influenza in Guam and 29 states was reported as widespread; Puerto Rico and 14 states reported regional activity; the District of Columbia, the U.S. Virgin Islands and five states reported local activity; and two states reported sporadic activity.

